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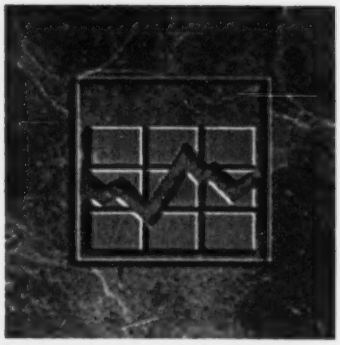
Comparing Income Statistics from Different Sources: Aggregate Income, 2005



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Symbols

The following standard symbols are used in Statistics Canada products:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
A, B, C, D	specific levels of data quality[1]
E	use with caution
F	too unreliable to be published
0	true zero or a value rounded to zero
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded

1. When the figure is not accompanied by a data quality symbol, it means that the quality of the data was assessed to be "acceptable or better" according to the policies and standards of Statistics Canada.

Summary

This report compares the aggregate income estimates as published by four different statistical programs.

One is the System of National Accounts that provides a portrait of economic activity at the macro economic level. Three other main programs generate data from a micro-economic perspective: two are survey based and the third derives all its results from administrative data.

Conceptual differences exist across the sources, they are generally of little impact between the three programs from the micro perspective but a large chasm exists when comparing them to the macro economic accounts.

Data exists internally that can permit the computation of comparable aggregates for the four sources except for a few exceptions on the SNA side which would necessitate the development of further satellite accounts.

Minor differences exist in population coverage between the different instruments used to measure from the micro perspective, the most important for the aggregate income measures being the coverage of the population on Indian Reserves and the exclusion of the Territories from the scope of the Survey of Labour and Income Dynamics.

Even when adjusting for known conceptual differences and allowing for statistical variability, some reconciliation issues remain. These are sometimes are explained by the use of different methodologies or data gathering instruments but they sometimes also remain unexplained.

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Highlights

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Introduction and purpose

Information on the incomes of the Canadian population is widely used to understand the financial situation of families and individuals, including the extent to which this income is sufficient to purchase basic goods and services. To meet this need, Statistics Canada publishes information on personal income derived from a number of different sources. The current major sources[1] are:

- Survey of Labour and Income Dynamics (SLID): SLID is a longitudinal household survey that is able to produce annual estimates of income. The primary focus of the survey is on the income and work situation of the Canadian population[2]. Each year, two groups (panels) of respondents are interviewed, each having about 15,000 households[3]. Each panel remains in the survey for six years.
- Annual Estimates for Census Families and Individuals (T1 Family File) (T1FF) and the Longitudinal Administrative Data (LAD) contain data derived from administrative files obtained from Canada Revenue Agency[4]. The main source is the *Income Tax and Benefit Return* file (T1) but they also draw on information from other administrative sources (e.g., the Canada Child Tax Benefits file) to compute additional fields, impute information for non-filers, and to create families. The LAD is a sample of the T1FF and combines information over a number of years, to permit analysis of the changes in income over time. For this paper, the output of the T1FF will be used.
- Census of Population: the Census is conducted every five years, most recently in May, 2006. Its purpose is to develop a statistical portrait of the Canadian population. It provides information about the characteristics of that population and asks basic questions (e.g., age, sex, marital status, etc.) to everyone and additional questions to every fifth household. The income questions (for the previous year's income, 2005 in this case) are asked of that one in five sample.
- System of National Accounts (SNA): The SNA approaches personal income from a different perspective. Rather than looking at the income of individuals or families, it looks at the aggregate income of the Persons and Unincorporated Business Sector (PUBS), one of the four sectors of the economy. The National Income and Expenditure Accounts (IEA, one component of the SNA) includes data on personal income in their sector accounts, which are intended to "define and measure total economic production for the country"[5]. The data are derived from administrative sources, as well as from surveys conducted by other areas of Statistics Canada.

Because the information from these sources is collected and/or generated in different ways, and through different vehicles, there are also differences in the income data that is produced from these sources. The purpose of this report is to document the most important of these differences, in order to help data users understand the reasons for any variations and assess the fitness of each source for different uses. Data for calendar year 2005 will be used to illustrate some of the differences. Although more recent years of SLID, T1FF and National Accounts data exist, 2005 was chosen because it corresponds to the latest available year with Census data.

Table 1 presents a few simple income concepts from different sources as can be seen in various standard products disseminated by Statistics Canada. This table highlights possible difficulties for the user as to coherence and interpretability of the selected statistics.

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1. A number of other household surveys also collect information on personal income, to provide contextual or descriptive information on the situation of individuals or families. Several of these are mentioned in the 'Income' section of *Your Guide to Data Sources on Census-related Topics* (Catalogue no.: 92-135-GWE). The income data of these other surveys will not be considered for the purposes of this paper. Some of them have previously been compared in a similar fashion though with a focus on questionnaires with income year 2000 in *Comparison of Income Estimates Across Household Survey Programs*.
2. There are a few exclusions, which will be discussed in this document.
3. From 1993 to 1995, SLID was only one panel. Income years prior to 1996 were typically covered by the Survey of Consumer Finances (SCF), inactive since the 1997 publication.
4. The Statistics Act provides Statistics Canada with access to individual tax returns from Canada Revenue Agency (section 24); the confidentiality of the information on those individual returns is also ensured in that Act, in section 17.
5. Statistics Canada, *Guide to the Income and Expenditure Accounts*, catalogue 13-603, October 1990, page 31.

Table 1 Selected Income Components as Published by Source, 2005

Source	Publication label in original tables	Millions of dollars[1]
SLID	Total income	844,406[2]
T1FF	Total income	851,596[3]
Census	Aggregate income	866,977[4]
SNA	Personal income	1,035,586[5]
SLID	Earnings	640,580[2]
T1FF	Total employment income	637,652[3]
Census	Aggregate employment income	660,720[4]
SNA	*not applicable*[6]	.[6]
SLID	Wages, salaries and commissions	585,081[2]
T1FF	Wages, salaries and commissions	592,641[3]
Census	Aggregate wages and salaries	613,393[4]
SNA	Wages, salaries and supplementary labour income (national basis)	695,093[5,7]
SLID	Self-employment income, non-farm	53,002[2]
T1FF	*not applicable*[6]	.[6]
Census	*not applicable*[6]	.[6]
SNA	Net income of non-farm unincorporated business, including rent	84,024[5]
SLID	Government transfers	96,633[2]
T1FF	Total government transfers	99,062[3]
Census	Aggregate government transfer payments	95,817[4]
SNA	Total government transfer payments to persons	136,247[8]
SLID	Old Age Security (OAS) and Guaranteed Income Supplement (GIS), Spouse's Allowance (SPA)	26,558[2]
T1FF	Old Age Security (OAS) and net federal supplements	27,965[3]
Census	Old Age Security pensions and Guaranteed Income Supplement	25,964[4]
SNA	Old age security payments	29,085[8]
SLID	Child tax benefits	10,153[2]
T1FF	Canada Child Tax Benefit	9,108[3]
Census	Aggregate child benefits	11,324[4]
SNA	Child tax benefit or credit	9,174[8,9]
SLID	Investment income	29,012[2]
T1FF	Investment income	35,222[3]
Census	Aggregate investment income	37,629[4]
SNA	Interest, dividends and miscellaneous investment income	114,383[5]

Table 1 Selected Income Components as Published by Source, 2005 (continued)

Source	Publication label in original tables	Millions of dollars[1]
SLID	*not applicable*[6]	.[6]
T1FF	Total income taxes paid	154,372[10]
Census	Aggregate taxes paid	153,622[4]
SNA	Deduct: Direct taxes, persons	165,051[5]

. not available for any reference period

1 Aggregate amounts from T1FF and Census were published in thousands of dollars, they have been converted here to millions of dollar

2. Table 202-0407 Income of individuals, by sex, age group and income source, 2005 constant dollars, annual
3. Table 111-0007 Neighbourhood income and demographics, taxfilers and dependents with income, by source of income
4. Number Reporting and Aggregate Amount Reported for Each Source of Income (32) and Selected Income, Demographic, Labour Force, Educational and Cultural Characteristics (92) for the Population 15 Years and Over of Canada, Provinces, Territories, 2005 - 20% Sample Data (Cat. No. 97-563-X2006009)
5. Table 384-0012 Sources and disposition of personal income, provincial economic accounts, annual (dollars x 1,000,000)
6. An aggregate amount similar to this income component is not directly available in published products.
7. Supplementary labour income' is published in monthly form in table 382-0006 (88,939 million $ for all of 2005)
8. Table 384-0009 Government transfer payments to persons, provincial economic accounts, annual (dollars x 1,000,000)
9. Family and youth allowances' are published on another line (165 million $ in 2005) and represent the Child Special Allowances (paid to agencies, institutions and foster parents). The Universal Child Care Benefit program is also published separately in SNA but did not start until July 2006.
10. Table 111-0026 Neighbourhood income and demographics, taxfilers and dependents by sex, income tax, deductions and benefits

1. Income concept

The income concept is very similar for the three programs that produce micro-level income data (SLID, Census and T1FF). It is defined generally as income from all sources, before income taxes and other deductions are taken into consideration[6]. There are several other notions that should be noted that are implicit in this concept. Because the income estimate is intended to provide an indication of the extent to which persons/families can, on an ongoing basis, meet their current needs for goods and services, the amounts included in income are intended to be those which are regular and recurring. Therefore, extraordinary amounts, such as inheritances or lottery winnings, would not be considered income. Capital gains are also excluded, for that same reason, from the income measure[7]. As well, the income reported is that which is received as cash, or an equivalent of cash. That means that the value of things such as housing or vehicles provided by an employer, or of home-grown food, would not be regarded as income[8]. There are a few relatively minor differences in the income categories for these three programs; they are discussed later.

The concept of personal income for the SNA, however, differs in some very significant ways which explains why the income estimate for the SNA is much higher. Personal income is defined as: the sum of all incomes received by persons residing in Canada, whether factor earnings from current production or current transfers from other sectors, plus the investment income that associations of individuals accumulate on their own behalf or on behalf of persons. Associations of individuals, include such things as charitable organizations, insurance companies and trusteed pension funds. The income of these associations of individuals would include amounts that would not be part of the income received by individuals, such as:

6. These three income programs producing data at the micro-economic level (individuals, families or households) attempt to follow as much as is practical the principles elaborated in *Final Report and Recommendations*, Expert Group on Household Income Statistics – The Canberra Group, 2001. Divergences will be noted where possible.
7. Capital gains are however measured on several data sources and can be considered a component of income for certain analyses.
8. The use of administrative tax files to derive income estimates often entails accepting to count the valuation of several non-cash benefits provided by employers.

- the investment income of trusteed pension funds, which hold the assets of most employer pension plans. The investment earnings of these funds are not received directly by individuals (and therefore not included in their income) but are held in the funds until paid out in the form of a pension following retirement;
- government transfers paid to non-profit organizations.

Because the persons and unincorporated business sector is more broadly defined than simply persons, the total income received by this sector is also higher, by approximately $75 billion dollars, or roughly 20%. This difference will be more fully explained in section 5.

There are two other major differences in the income concept used by the SNA which should be briefly noted here, although they will be discussed again below under the appropriate income category:

- income for the SNA is recorded when the money moves from one sector to another. Therefore, pensions from employers are not considered income at the time the pension is received, but at the time the contributions are made by employers in the corporate and government business enterprises sector. These employer contributions are part of supplementary labour income, which is reported together with wages and salaries. The pensions themselves are not considered income, as that money already "belongs" to the personal sector. Pension payments are regarded as a drawing down of assets.
- the SNA considers persons who own their home to be self-employed and attributes to them an imputed income equivalent to the rental income they would receive if they rented their dwelling. This is done to recognize the economic value of home ownership.

There is one other minor difference in terms of the amounts involved in the income measure used by the SNA. That measure also includes current transfers from non-residents (largely pensions paid by foreign governments) and transfers from corporations to persons (largely charitable donations). These are, for the most part, either not taxable (and thus difficult to measure for specific households) or paid not to persons but to "associations of persons" (and therefore would not be considered in the income estimate of the three other programs). These transfers (from non-residents and corporations) together total about $4 billion, less than half of 1% of personal income as measured by the SNA.

2. Sampling and non-sampling errors

Beyond the conceptual differences, many kinds of error can help explain differences in the output of the programs that generate data on income. They are often classified into two broad types: sampling errors and non-sampling errors.

Sampling errors occur because inferences about the entire population are based on information obtained from only a sample of that population. Because SLID and the long-form Census are sample surveys, their estimates are subject to this type of error. The coefficient of variation is a measure of the extent to which the estimate could vary, if a different sample had been used. This measure gives an indication of the confidence that can be placed in a particular estimate. This data quality measure will be used later in this paper to help explain why some of SLID's estimates, which are based on a smaller sample, might differ from those of the other programs generating income data. While the Census is also subject to this type of error, reliable estimates can be made for much smaller populations because the sampling rate is much higher for the Census (20%).[9]

Non-sampling errors can be further divided into coverage errors, measurement errors (respondent, interviewer, questionnaire, collection method…), non-response errors and processing errors. The coverage errors are generally not well measured for income and are usually inferred from exercises of data confrontation such as this. Section 3 will review the population exclusions and other known coverage differences between the sources.

The issues of various collection methods or mixed response modes and the different types of measurement errors that could arise will be approached in section 4 below.

9. The sampling error from one-year estimates of individual income based on the LAD would also be of a similar magnitude as its sampling rate is also one in five.

Non-response can be an issue in the case of surveys. It is not always possible to contact and convince household members to respond to a survey. Sometimes as well, even if the household responded, there may not be valid responses to all questions. In both cases adjustments are performed to the data but error may result as the quality of the adjustments often depends on the non-respondents being similar to the respondents. For the 2005 income year, SLID had a response rate of 73.3% and for the Census, it was close to 97%. Still for 2005, because of item non-response, all income components were imputed for 2.7% of SLID's respondents and at least some components were imputed for another 23.5%[10]. In the case of the Census, income was totally imputed for 9.3% and partially imputed for 29.3%.

In administrative data – in particular the personal tax returns – the filing rates for specific populations may depend on a variety of factors (amount owed, financial activity during the year, personal interest, requirement for eligibility to support programs, etc.) and this could also result in differences in the estimates generated by the programs producing income data.

The systems and procedures used to process the data in each of the programs are different and may have design variations that impact the data in special ways. When such discrepancies have been identified, they will be mentioned in section 5. Beyond the design variations, most processing errors in these data sources are thought to be detected and corrected before the release of data to the public. However due to the complexity and to the yearly modifications of processing systems, some errors may remain undetected and they are therefore quite difficult to quantify.

More detail on the quality and methods of individual statistical programs is accessible through the Surveys and statistical programs by subject section on Statistics Canada's website.

3. Coverage

The coverage of a survey or administrative data source expresses the degree to which the program captures the concept intended to be measured. Many accuracy, cost and collection burden objectives have to be balanced when designing a survey. Administrative data programs face the difficulty that the data was not originally gathered to produce these statistics. How each survey responds to these different choices may impact comparisons across different sources.

Perhaps the most obvious place to start comparisons is by identifying differences in the population covered by these sources. This information is described in general terms in Table 2; additional detail is provided in AppendixA.

10. *Data Quality in the 2005 Survey of Labour and Income Dynamics*, C. Duddek, Income Research Paper Series, Statistics Canada catalogue no. 75F0002-No.003, May 2007.

Table 2 Summary population coverage comparison

Survey of Labour and Income Dynamics (SLID)	The SLID is an important source for income data for Canadian families, households and individuals. Income data from SLID are collected from a sample of the population aged 16 years or over. The 2005 data were derived from approximately 30,000 households. Several groups are excluded from the sample, and from the estimates: residents of the territories, Canadians living outside Canada, persons living on Indian Reserves, residents of institutions and the military living in barracks. In total, they are estimated to represent less than 3% of the population. Weights are calibrated to match population estimates from Statistics Canada's Demography Division for different age/sex groups and earnings groups in Canada Revenue Agency (CRA) administrative data (T4 file), to ensure income distributions match those of the population. Income data is retrieved from the T1 file for consenting respondents and from computer assisted telephone interviews for the others.
Annual Estimates for Census Families and Individuals (TIFF)	The intention of T1FF is to provide information on the income of all persons residing in Canada, or spouses living outside the country who filed tax returns. The information source is personal tax and benefit returns (T1), and other administrative sources such as Canada Child Tax Benefit files and the T4 file. Therefore some individuals, who did not file a tax return, or filed it quite late, may be missing, if information for them is not derived from the other administrative sources. T1FF data is estimated to cover about 95% of the population.
Census of Population (CP)	The Census provides information on all Canadian citizens, non-permanent residents living in Canada and those temporarily living abroad. Income data are reported by a one in five random sample of dwellings in Canada and total population estimates are derived using weights. (The initial weight of about five is adjusted to ensure closer agreement between sample estimates and the enumerated population counts for different variables, such as age and sex.) The income data for individuals 15 years of age or older is retrieved from the T1 file for consenting respondents and from a paper questionnaire and/or via Internet for the others.
System of National Accounts (SNA)	The SNA considers persons and households as part of the Persons and Unincorporated Business Sector (PUBS), and treats that sector as one unit. It includes, in addition to persons and unincorporated businesses, non-profit institutions serving households. They are non-profit institutions, such as churches, labour unions and charitable organizations, plus credit unions, trusteed pension plans, life insurance companies, fraternal societies and mutual non-life insurance companies. This means, for example, that the investment income of pension funds that is not directly received by individuals, but held in trust for them, is included in the income for the SNA's Income and Expenditure Accounts (IEA) for the PUBS; that investment income would not be reported as personal income. The income data is constructed partially from the T1 file but also from the information slips payers file with the CRA.

The impact of each of these specific decisions to include or exclude difficult-to-reach populations or selecting different age, is relatively marginal at the Canada-level. However, these conceptual coverage discrepancies are often discussed and may be crucial if one is interested in a particular population, region or income component. Where it is possible to derive a Canada-wide estimate, the impact of coverage decisions on aggregates of employment income and total income are presented in Table 3.

Table 3 Estimate of Absolute and Relative Impact on Earnings and Total Income of Different Coverage Restrictions, 2005

		Employment income		Total income	
	All persons	Recipients	Aggregate Amount	Recipients	Aggregate Amount
	number	number	millions $	number	millions $
Canada[1]	31,612,897	18,201,265	660,724	24,423,160	866,973
Geography restrictions					
Persons living in the Territories[1]	101,310	58,875	2,456	70,380	2,814
%	0.32	0.32	0.37	0.29	0.32
Persons living on reserve[1,2]	343,290	126,535	2,675	216,255	3,919
%	1.09	0.70	0.40	0.89	0.45
Canadians living abroad (2C forms)[1]	6,545	4,030	254	4,630	268
%	0.02	0.02	0.04	0.02	0.03
Filers from abroad[3]	15,940	8,700	554	12,210	580
%	0.05	0.05	0.08	0.05	0.07
Dwelling type restrictions					
Institutional residents[1]	371,870	..	..	..	..
%	1.18				
Members of Hutterite colonies[1]	30,670	..	..	..	..
%	0.10				
Members of Hutterite colonies[3]	31,390	15,980	180	..	..
%	0.10	0.09	0.03		
Living on military bases (excludes those on vessels)[1]	4,635	4,020	141	4,440	148
%	0.01	0.02	0.02	0.02	0.02
Personal characteristics restrictions					
Age under 15 years old[1]	5,582,265	..	..	..	..
%	17.66				
Age under 15 years old[3]	5,620,550	28,160	96	48,020	230
%	17.78	0.15	0.01	0.20	0.03
15 years of age on Census Day[1]	445,470	105,990	328	123,760	424
%	1.41	0.58	0.05	0.51	0.05
16 years of age on Census Day but 15 on Dec. 31, 2005[1]	168,605	59,205	191	66,620	229
%	0.53	0.33	0.03	0.27	0.03
Immigrants landed in 2006 before Census Day[1]	78,815	..	..	..	..
%	0.25				

Table 3 Estimate of Absolute and Relative Impact on Earnings and Total Income of Different Coverage Restrictions, 2005 (continued)

		Employment income		Total income	
	All persons	Recipients	Aggregate Amount	Recipients	Aggregate Amount
	number	number	millions $	number	millions $
Immigrants landed in 2006 before Census Day[3]	14,300	6,780	181	10,160	216
%	0.05	0.04	0.03	0.04	0.02
Deaths during 2005[3]	191,030	34,510	490	..	..
%	0.60	0.19	0.07		
Deaths during 2005 and up to Census Day[3]	267,750	50,220	802	..	..
%	0.85	0.28	0.12		

.. not available for a specific reference period

1 Source: Census of population.

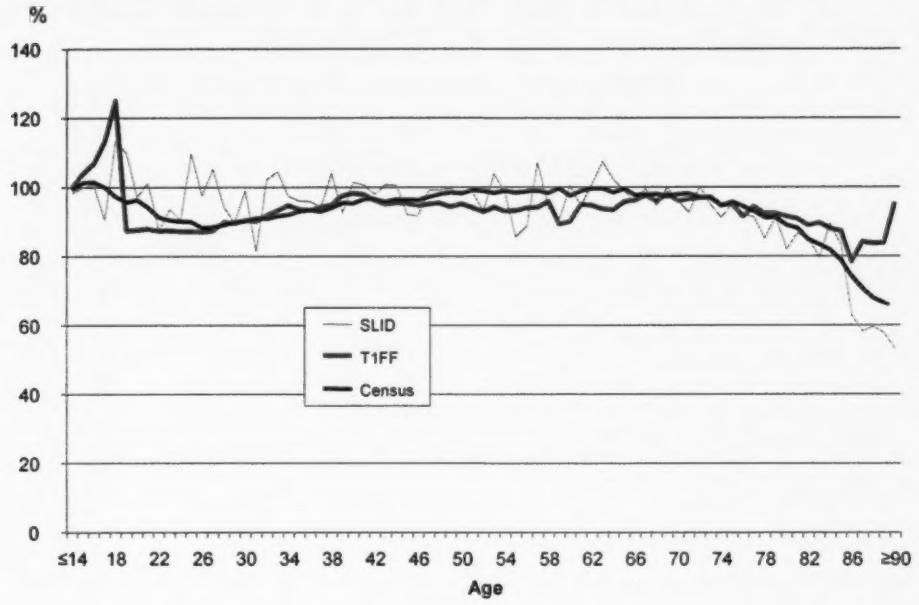
2 Excludes census data for one or more incompletely enumerated Indian reserves or Indian settlements.

3 Source: T1 Family File. The All Persons column contains all persons on the dataset (tax filers and dependents). Other columns mainly contain tax filers only.

4 Source: Longitudinal Administrative Database. Actually earnings and total income in 2004 for 2005 landings adjusted for part year effect (2006 landings not available at production time).

There remain further coverage differences across the programs. Those included in this second group are of a less conceptual nature but rather more akin to unintentional coverage error or measurement error. Certain segments of the population may be more difficult to reach with some of the collection methods (for example, because they do not file a tax return or do not complete their Census form, etc.). Figure 1 illustrates the empirical differences in population coverage according to data source for the programs that are micro-record based by age characteristics. Three points draw attention in figure 1. First, coverage of the 20 to 40 year olds on T1FF and Census is lower than for other segments of the population. SLID manages to partially compensate the difficulties of reaching this population during the weighting stage by calibrating the counts in specific age groups. Second, there is a spike of over-coverage on T1FF for young persons, 15 to 19. This results from counting twice some persons that filed a tax return (possibly with income) and were listed as dependents of their parent(s) in another dwelling. Third, the population over 70 is less well covered due to the exclusions of persons in institutions or collectives.

Figure 1 Persons in datasets vary by source and age compared to 2005 population estimates



Coverage profiles by age such as shown in figure 1 that compare counts with official population estimates are relatively easy to create. Alternate profiles (for recent immigrants or Aboriginals for example) would be more difficult to generate because of data availability and sample size limitations though they probably would show even greater discrepancies across the sources.

4. Source of income data

For the first time, 2005 estimates of income from all of the above programs were based largely on income tax data. In order to minimize response burden and increase quality, SLID has, since 1994, asked respondents for permission to use the income data from their T1 return, rather than reporting this information directly. Approximately 80% of respondents chose to do this. Because of the success of this approach, the Census, for the first time in 2006, also asked respondents for permission to use tax data; 82.4% gave permission[11]. The primary source of income data, for the T1FF and the LAD, is also the T1 file. And, finally, the SNA's Income and Expenditure Accounts derive income estimates for the PUBS largely from administrative data such as, but not exclusively, the personal *T1 Income Tax and Benefits Return.*

There are advantages to using income data from tax records rather than from survey responses. One is reducing respondent burden, there is no need to engage respondents in a recollection of data that is readily available. A second advantage is improving the quality of the collected data as it is believed the tax records generally provide a better picture of a respondent's economic activity than the survey questions.

The survey mode is particularly vulnerable to response errors, either because the respondent was unwilling or unable to provide the information requested, or because the respondent misinterpreted a particular question. Illustrations of this type of error could be forgetting a small amount, reporting a rounded amount (to the closest $100, $1,000 or $5,000), not computing allowances for depreciation when reporting self-employment income, etc.

11. For a discussion of permission rates seen in the early years of SLID, consult *Results of the Tax Permission Questionnaire in the Survey of Labour and Income Dynamics* E. Abraham et al., Income Research Paper Series, Statistics Canada catalogue no. 75F0002-No. 002, March 2001.

Because of the requirements of the Income Tax Act, taxfilers are given precise guidelines to follow when completing their tax return. These guidelines, the presence of documentation (information slips) from the employers or payers and the review by an income tax preparer and/or CRA help to ensure that income is reported consistently.

However, the differences between the two modes are not all in favour of tax data. Some respondents do not permit use of their income tax records when offered the option as indicated above. There may also be issues finding the correct tax record since the respondent does not provide their Social Insurance Number and probabilistic linkage of the files is required[12]. The respondent may not have filed a tax return. There are also conceptual difficulties mapping the administrative fields to the desired income components. For example, some income components are non-taxable (or only partially taxable) and may not be required on the tax return[13]. Others may have an allocated space for reporting but since they are not crucial to the calculation of income tax, they are subject to less scrutiny by CRA. Some in-kind benefits offered by employers are taxable and have been accepted as income as it is difficult to separate the in-kind components on the tax returns.

Additionally, there is the possibility that income may not be fully disclosed on the T1 form. This may be an issue in surveys as well.

Although the use of a common input file and collection methodology for most of the records helps to minimize the differences in the estimates produced by the different programs, there are other reasons for differences, which are discussed below.

5. Components of income: explaining some differences

In this section income is broken down into its components, to better explain the differences in the estimates produced by the four programs considered in this document. The data that will be compared in this section are contained in Appendix C and represent standardised aggregate measures for the ten provinces[14]. The territories have been excluded for purposes of comparability, since SLID does not include the territories in its survey[15].

Earnings / employment income

Earnings or employment income is, by far, the major component of income. It is made up of wages and salaries and self-employment income. These will be addressed in turn.

Table 4 Comparison of aggregate employment income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Employment income	640,580	635,274	658,064	656,025
Wages and salaries	585,081	592,120	611,059	605,467
Net income from self-employment	55,499	44,935	47,005	50,558
Net income from farm SE[1]	2,497	1,205	2,120	1,210
Net income from non-farm SE[1]	53,002	43,730	44,885	49,348

1. Consult Appendix E for the meaning of acronyms.

Wages and salaries (reported on lines 101 and 104 of the T1 return) includes, in addition to regular pay, overtime, tips, commissions, bonuses and a number of other items.

12. For the 2006 Census, 89.1% of the consenting respondents were found in the 2005 tax file. A slightly higher rate was obtained for SLID as manual verification of uncertain links is possible with that sample size.
13. Such as child benefits, veterans' pensions and scholarships or bursaries less than $3,000 in 2005.
14. The unadjusted data as published and adjustments are available in Appendix B tables.
15. The Canada-wide measures are reported individually in Appendix B for the sources that permit it.

The unadjusted figure for the SNA is considerably larger, primarily because the figure that is published in the *Income and Expenditure Accounts* (catalogue 13-001) is for wages and salaries and supplementary labour income (SLI). SLI includes employers' social contributions, most notably employer contributions to the CPP or QPP, workers' compensation plans, pension plans and other benefit plans as well as retirement allowances.

As noted earlier, for the SNA, contributions to pension plans are recorded as income, while the benefits received from these plans are considered a reduction in assets. The retirement allowances are expected to be counted as income in all three sources even though they are usually provided in a non-recurring way. This decision was mainly practical due to the non-availability of distinctions in the tax data used as principal source.

A second adjustment that must be made is to add royalties, which are included in wages and salaries for SLID, the Census and T1FF (as they are reported on line 104 of the T1 tax return) but are not included in the SNA where they are considered part of Interest, dividends and miscellaneous investment income. All adjustments made to the SNA data are summarized in Appendix B.

This brings the aggregate SNA figure much closer to those of the other three programs. Wages and salaries are somewhat higher for the Census than for SLID and T1FF, as can be seen above. It is even more dramatic when considering that because of the Census net under-coverage, the population reported is 2.8% lower than the official estimates. There is no information to help assess the income levels of the under-covered (though if they were similar, one might expect the aggregate 2.8% lower).

Possible explanations for these differences might include misclassification of the income component — income that is truly from self-employment might be reported as wages and salaries; miscapture of paper reported amounts and reporting amounts not formally documented as income with CRA. The estimates published by SLID and T1FF are very similar. The small difference (less than 1%) could be attributed to sampling variability or to the fact that SLID excludes the income of certain groups of persons, as indicated in Appendix A (e.g. those living on Indian reserves, residents of institutions and the military living in barracks).

Table 5 presents distributional statistics for data sources which can provide disaggregated data. These highlight that using the aggregate measures for comparisons may mask differences and similarities between estimates of different points of the distributions. Thus, the comparison of aggregate data is not sufficient to identify dissimilarities and reconcile the data sources for all analysis projects[16].

16. The distributional statistics and semi-aggregated statistics will be examined in a companion paper to be published later.

Table 5 Wages and Salaries Distribution Statistics by Source for Canada (Provinces only), 2005

		Wages and salaries					
		SLID[1,2]	T1FF[1,2]	Census	SNA[1,3]	T1[1,4]	T4[1,5]
		number					
Recipients	number	16,691,700	16,042,110	16,702,425	..	16,395,200	16,645,670
Aggregate	thousands $	585,878,670	590,349,648	611,059,104	605,467	578,750,560	602,573,254
Average	$	35,100	36,800	36,585	..	35,300	36,200
p5[6]	$	1,200	1,100	1,027	..	130	1,200
p10	$	3,000	3,200	3,000	..	1,700	3,100
p15	$	5,100	5,600	5,336	..	4,000	5,200
p20	$	7,600	8,000	7,895	..	6,500	7,600
p25	$	10,100	10,700	10,516	..	9,100	10,300
p30	$	13,100	13,600	13,653	..	12,000	13,200
p35	$	16,500	16,900	17,000	..	15,200	16,500
p40	$	20,000	20,300	20,447	..	18,600	19,900
p45	$	23,900	24,000	24,222	..	22,300	23,500
Median	$	27,500	27,600	28,000	..	26,100	27,300
p55	$	31,000	31,300	31,569	..	30,000	31,000
p60	$	34,900	35,100	35,396	..	33,900	34,800
p65	$	38,800	39,300	39,645	..	38,000	38,900
p70	$	43,200	43,800	44,053	..	42,600	43,400
p75	$	48,400	49,000	49,325	..	47,800	48,500
p80	$	54,700	55,300	55,488	..	54,100	54,800
p85	$	62,000	63,100	63,198	..	62,000	62,500
p90	$	72,900	73,800	73,832	..	72,700	73,100
p95	$	90,000	92,100	92,000	..	90,900	91,100
p99	$	160,000	166,400	164,722	..	163,300	162,400

.. not available for a specific reference period

1. Consult Appendix E for the meaning of acronyms.
2. Certain harmonisation adjustments could not be performed at the microdata level. The aggregate amounts do not correspond exactly to those in Table 4.
3. SNA data is only available at the aggregate level so it is not possible to supply a distribution.
4. T1 file is the raw data received from CRA (with deceased filers removed), the main difference compared to the T1FF is the presence of $1 amounts in the fields of several hundred thousand records. For SLID and T1FF these have been set to zero, in Census, they have been imputed using
5. T4 represents the slips filled in by the employers and filed with CRA, they have been aggregated by person (following the Social Insurance Number) and rounded to the closest $100.
6. Level of the 5th percentile.

Income from self-employment is the second component of earnings.

Non-farm self-employment income represents the gross receipts of non-farm unincorporated businesses and professional practices, less operating expenses such as wages, rents and depreciation. Once again, the estimate from the Income and Expenditure Accounts of the SNA is considerably higher. This is because, as already noted, the SNA considers persons who own their home to be self-employed, and attributes to them an imputed income equivalent to the rental income they would receive if they rented their dwelling. SLID, T1FF and the Census do not include such a value in their income measures. As well, the SNA includes other rental income with self-employment income; SLID and the Census consider it investment income and T1FF considers it other income (see reconciliations of specific sources in Appendix B). The adjustments that must be made to the non-farm self employment income of the SNA are reported in Appendix B.

Again, this minimizes the difference between this estimate and those of the other three programs. SLID aggregate self-employment remains higher than the other adjusted sources – the calibration of SLID into income classes may possibly account for some of the apparent over-coverage of the self-employed (they are pooled with the under-represented non-wage earners). This area requires further study.

Farm self-employment income represents the gross receipts from farm sales less depreciation and the cost of operation. Gross receipts includes cash advances, dividends from co-operatives, rebates and farm support payments. Income in-kind, such as the value of agricultural products produced and consumed on the farm, are included in the SNA estimate but excluded from the estimates of the other programs. This in-kind income amounted to a relatively small proportion of total net farm income in 2005 ($126 million[17]).

The table below provides data from Agricultural Division's publication *Net Farm Income.*[18] The figure that can be used to compare with the estimates from SLID, T1FF and the Census is $1,571,127,000 (calculated by deducting income-in-kind (126,261,000) from realized net income (1,697,388,000).

Table 6 Components of net farm income, 2005

	2005
	thousands $
Cash receipts, total	36,683,856
Less: Operating expenses after rebates	30,497,956
Equals: Net cash income	6,185,900
Plus: Income-in-kind[1]	126,261
Less: Depreciation charges	4,614,773
Equals: Realized net income	1,697,388
Plus: Value of inventory change[1]	589,012
Net income, total	2,286,400

1. Excluded from SLID, Census, T1FF
Source: Agriculture Division, *Net Farm Income*, Catalogue 21-010, Nov. 2007

This figure compares quite closely with that of T1FF but is considerably lower than the estimate generated by SLID. Sampling variability could be an explanation for this. The farming population is relatively small and therefore the sample of those with farm income in SLID would be correspondingly small. For this reason, the coefficient of variation for this estimate is quite high (16% or higher) and the published figure is accompanied by a note indicating that the estimate should be used with caution. It cannot be said that it is significantly different from the Census but both estimates are still higher than T1FF and SNA data.

Investment income

For SLID, T1FF and the Census, the concept of investment income is very similar: it includes dividends, interest from such things as deposits, savings accounts, bonds, debentures, t-bills and loans, and other miscellaneous forms of investment income[19]. Rental income is included for SLID and the Census but not for T1FF and the SNA. The estimates of aggregate investment income for the Census and T1FF are very similar once adjusted for net rental income, although it is about 20% lower for SLID. This may partly be due to sampling variability and weight editing to reduce the influence of outliers but may also point to difficulties reaching the very high income people in a survey context.

17. *Net Farm Income*, Statistics Canada Catalogue 21-010, November 2007, page 13.
18. *Net Farm Income*, Statistics Canada Catalogue 21-010, November 2007.
19 Investment income does not include capital gains, as noted in section 1.

Table 7 Comparison of aggregate investment income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Investment income	29,012	38,883	37,755	39,812

1. Consult Appendix E for the meaning of acronyms.

As can be seen in the table above, the estimate produced by the SNA is significantly higher than for the other three programs. This is because, as previously noted, it includes the interest accrued during the year in the non-profit institutions serving households (mainly employer pension plans, RRSPs and life-insurance companies), as these investment earnings are considered income at the time they are generated. For SLID, T1FF and the Census these amounts would not be regarded as income until the benefit from these plans is received. The SNA also includes in investment income the interest on investments made by other "associations of individuals". When these amounts are deducted from the SNA estimate of investment income the result is very similar to the estimate produced by T1FF and the Census. Work is underway in the SNA to develop a pension satellite account which would show the flows in and out of these institutions[20].

Retirement income

Retirement pensions include all regular income received as the result of having been a member of a pension plan of one or more employers or of contributing to a Registered Retirement Savings Plan (RRSP). This income may be received in various forms: as an annuity, superannuation or Registered Retirement Income Fund (RRIF). Lump-sum benefits are not included, although, for data obtained from tax returns, RRSP income reported on line 129 of the tax return is included, but only if the individual is 65 or older[21]. Pensions paid to widows or children of deceased pensioners would also be included here.

Table 8 Comparison of aggregate retirement income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Retirement income	58,993	56,465	56,906	.

. not available for any reference period

1. Consult Appendix E for the meaning of acronyms.

Processing for the 2006 Census was slightly different in one respect than that for SLID and T1FF: an additional procedure sought to remove from income any lump-sum transfers to RRSPs. These transfers are identified on the tax form and may come from RRSP withdrawals, pension income or the other income fields on the tax return. These are conceptually not income since they represent shifts from one savings vehicle to another. This adjustment will decrease the aggregate Retirement income as it reduces the amounts reported in pension income and for RRSP withdrawals (only those of those aged 65 years or older are counted as income).

The concept of retirement income is essentially the same for SLID, T1FF and the Census and the estimates also are essentially the same though the Census is slightly lower than the other two sources which might be partially explained by the modified processing techniques. As noted earlier, the SNA does not consider pensions to be income at the time they are paid as benefits, but rather at the time the contributions are made and the investment earnings accrue. It is thus quite difficult to arrive at comparable or reconcilable estimates.

20 "Preliminary results of the Pension Satellite Account, 1990 to 2007" in the *Latest Developments in the Canadian Economic Accounts* (13-605-X) shows a time series of pension assets.

21 This is because RRSP income as reported on line 129 could be either a withdrawal or an annuity. If the person is less than 65 the amount is assumed to be a withdrawal, and is therefore not considered income, as it would not be received on a regular basis.

Government transfers

Government transfers include all transfer payments from federal, provincial or municipal governments programs intended to provide income support to certain groups, such as seniors, families and those injured on the job. Specific major programs are listed in the table above. For the SNA, it also includes transfers to "associations of individuals", for example, to benevolent associations or Aboriginal associations and also includes scholarships and research grants[22], which are included in other income or employment income for the other three programs. For that reason it is difficult to compare the estimate from the SNA with that of SLID, T1FF and the Census. It is not surprising, however, that it is considerably higher than the other estimates.

Table 9 Comparison of aggregate government transfers, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]	Admin. data[2]
			millions $		
Government transfers	96,633	97,969	95,591	110,394	.
Child benefits	10,153	11,204	11,278	11,664	.
Federal child benefits	7,872	9,129	.	9,129	9,129
Provincial child benefits	2,280	2,075	.	2,371	2,371
OAS and GIS	26,558	27,152	25,927	25,996	29,052
Canada Pension Plan and Quebec Pension Plan benefits	28,705	30,144	29,018	29,261	31,614
Employment Insurance benefits	12,688	12,134	11,978	12,616	13,398
Other government transfers	20,402	17,334	17,390	30,858	.
Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits	3,154	3,051	.	3,462	.
Workers compensation benefits	5,001	4,559	.	5,201	4,970
Social assistance	8,616	8,076	.	13,313	9,163
Provincial and territorial tax credits	1,758	1,647	.	.	.
Military pensions and allowances and miscellaneous transfers	1,873	.	.	.	.

. not available for any reference period

1. Consult Appendix E for the meaning of acronyms.
2. The administrative data have not been adjusted conceptually and the sources are presented below in Table 10.

Included in the Government transfers table above, in addition to the estimates of the four programs examined in this report, are data from administrative sources. These data are not readily available for all transfer income components but several can be produced as special tabulations of various tax slips obtained from CRA. These slips were generally produced by the payer and sent to the income recipient to assist when completing their tax return and a copy was made for CRA as well.

For other small governmental programs, it may not be possible to obtain micro-record data (especially if they are non-taxable) and they are not practical to measure or impute precisely in a survey context. SNA however, may include them in their government accounts as the global amount of each program may be more easily known.

22. For the non-SNA programs, scholarships and bursaries are included in the component Other income; net research grants are included under wages and salaries.

Table 10 Sources of Administrative Data for Government Transfer Components

Government transfer component	Administrative data source
OAS / GIS / ALL	T4OAS OAS and GIS benefits
CPP / QPP	T4AP – Statement of CPP Benefits
Federal child benefits (CCTB and NCBS)	CCTB administrative file received from CRA
Provincial and territorial child benefits	Annual report[1]
Employment Insurance (EI) benefits	T4E Statement of Employment Insurance and Other Benefits
Workers compensation benefits	T5007 – Workers Compensation and Social Assistance Benefits[2]
Goods and Services Tax (GST), Harmonized Sales Tax (HST) credits	GSTC administrative file now available from CRA for 2007 but not 2005.
Social assistance	T5007 – Workers Compensation and Social Assistance Benefits[2]

1. This is not an administrative file but was mostly sourced from administrative reports (such as The National Child Benefit Progress Report 2006); ad-hoc adjustments were required to manipulate data for program years into calendar years and add in data from the Régie de rentes du Québec for the Quebec child assistance program.
2. Infrequent data errors of large amounts may overstate slightly the aggregates from this source.

The administrative amounts usually have full coverage of amounts paid during the year (though for social assistance benefits that might be disputed) and as such are closer to the concept of the SNA because of the coverage limitations of the other sources with respect to deaths and institutional or collective populations. The T1FF is less affected as it re-assigns the income of the deceased to a surviving spouse if there is one and it is thought to have relatively good coverage of the institutional population.

The SNA uses most of these administrative sources to generate their estimates, which are consequently very close. The slightly lower estimates produced by T1FF may be due to non- or late filers. One would expect the estimates produced by SLID and the Census to be more comparable to those of T1FF, as tax data is the primary source for all three programs. This is indeed the case, although the estimates from SLID and the Census are somewhat lower than T1FF's (usually by less than 5%). For several programs catering mainly to older adults (such as OAS / GIS / ALL and CPP / QPP), the main discrepancy could be due to income recipients deceased during the year (or before Census day for the Census) and to persons living in institutional settings such as retirement homes or nursing homes which are generally excluded from the SLID population and the Census long form population. Some processing options in SLID and Census also compute entitlements and assign them as if the take-up rate was 100%.

Additional discrepancy at the conceptual level exists because OAS and EI have specific means-tested repayments listed on the tax return. It is possible to include as income only the part that will not be repaid at tax time (as Census and SLID do) or to use the full amount paid and increase the tax paid by the amount of these social benefits repayments (as T1FF and SNA do). This affects the individual components, total government transfers and total income. Regardless of the accounting chosen for a specific statistical program, the after-tax income concepts are identical for all. For EI benefits, the amounts repaid at tax time correspond to 1% of total benefits paid. For OAS repayments, this corresponds to 3% of benefits paid.

With respect to child benefits, the published estimate for T1FF is lower than that for SLID and the Census because T1FF tables include benefits from provincial and territorial child benefit programs in another category with provincial/territorial tax credits. T1FF's published estimate of provincial/territorial tax credits/benefits is therefore correspondingly higher than SLID's. Once adjusted, the SLID data seem almost 10% lower than estimates from other sources. Most of the differences come from the Federal child benefits component.

Under other government transfers, SLID and T1FF both generate estimates for specific sub-components (e.g., worker's compensation, social assistance and tax credits) using tax data or other administrative sources and, for those who do not provide permission to use their tax returns, SLID specifically asks respondents for the amount of income they receive from each of these programs. The Census, on the other hand, asks one question on other

government transfers globally, providing examples of programs to consider; it is therefore possible that there is some response error, because respondents may not recall all of this income.

Some additional variations in published tables may exist because of publication practices. For confidentiality purposes, T1FF removes income from their tables for atypical circumstances even in the most aggregated, Canada-level data. For example, people without children at year end are assumed not to have received child benefits though that situation is possible on occasion if a child has died or custody has changed during the year. The dataset retains the original values so custom tabulations may take advantage of the atypical data for special analysis.

Other income

Other income is a residual category for the surveys including very different components and this causes some classification and comparability issues across the income statistics programs. For example, Other income in the T1FF estimates includes net rental income and income from limited partnerships. These are classified as Investment income in other sources. These two components can be measured and re-assigned but other discrepancies are more difficult to reconcile. In tax data, a variety of elements are reported on line 130 of the tax form under the Other income heading and these may include with market income some government transfers such as large scholarships. Another example is that transfers to an RRSP can sometimes appear here. Census procedures screen out the amounts recognised as transfers to a registered plan.

Table 11 Comparison of aggregate other income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Other income	19,188	16,908	15,817	.

. not available for any reference period

1. Consult Appendix E for the meaning of acronyms.

T1FF procedures identify non-filing spouses mentioned on their partner's return. The net income may be reported on the filing spouse's return. If no T4 slip was filed by the employer, this income is then usually classified quite arbitrarily into *Other income*[23]. In 2005, 196 million dollars were classified in this way.

A proportion of the SLID figure includes income amounts reported in a catch-all category with respondents' description of the component (1,546 million dollars in 2005). In 2005, the extra component fields were not coded and the amounts were classified into *Other income*.

These differences may help explain why the Census estimate is less than the other two but may not fully explain. One singularity of the T1FF as opposed to Census and SLID is the treatment of alimony and child support amounts received. The T1FF focuses on the taxable portion of support payments received whereas Census and SLID are trying to measure the total transfer.

The amounts in this component, for the SNA, are mostly considered transactions between actors within the Persons and unincorporated businesses sector so these would not be considered personal income for SNA as they do not come from other sectors of the economy.

Total income

The difference between the lowest and the highest measure of aggregate total income from SLID, Census and T1FF is approximately 2.4%. The Census estimate is somewhat higher than either SLID's or T1FF's; some of the reasons have been examined when considering individual components (such as earnings).

23. One exception is when the non-filing spouse is thought to be over 65 years of age. In this case, any amount up to basic OAS ($5,706 in 2005) is classified in the OAS / GIS field and the remainder, if any, would be sent to Other income. The net income amount reported on the spouse's return is not adjusted to include any possible deductions for RRSP or pension contributions, union dues, admissible child care expenses, etc. before counting it.

Table 12 Comparison of aggregate total income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Total income	844,406	847,982	864,163	.

. not available for any reference period
1. Consult Appendix E for the meaning of acronyms.

For SNA, the comparable figure is not computed because of the conceptual differences related to the issue of how to account for the transfers between different members of the Persons and unincorporated business sector.

Income tax

Income tax is not itself a component of income but it is useful for assessing the money available to households for current consumption and saving. The concepts of income tax are broadly similar across programs. The reference period is one crucial difference.

Table 13 Comparison of aggregate income tax paid, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
Income tax	145,294	152,974	153,160	163,936
Federal income tax	88,943	93,375	.	.
Provincial income tax	56,352	59,599	.	.

. not available for any reference period
1. Consult Appendix E for the meaning of acronyms.

The concept used for the three micro-economic programs (SLID, Census and T1FF) is the income tax paid on the income of the reference year whether or not it was paid during the calendar year or at tax filing time (usually the following spring). Any amounts paid in April of the reference year for the previous year's balance of liabilities are not considered.

For practical and quality reasons, the SNA reference period is different, it is on a cash basis instead of using an accrual method referring to the period of the economic activity: all amounts paid during the year as income tax are counted whether they are for past, current or future liabilities net of any over-payments for prior years. This generates inconsistencies across programs and renders reconciliations with SNA data more difficult. The inconsistencies would be greater in periods when income tax rates or economic activity is more variable.

In Quebec, Ontario and Alberta some amounts are collected with the tax return but are labelled separately as Health taxes. These are included in the income tax concept. Other provinces may have a separate contribution program to their health insurance schemes but if they are not collected on the income tax returns, they are not considered income tax in these frameworks. As mentioned earlier, the refund of social programs (such as Employment Insurance Benefits and Old Age Security pensions) is considered by SLID and Census as reductions in program benefits but for T1FF and SNA they are considered included as income and an equivalent tax.

The full year concept is relatively difficult to obtain accurately from respondents if asked directly on a questionnaire (they often report refunds or final payment amounts only). This therefore makes after-tax income a challenge to measure for programs that are exclusively respondent-based. Since all programs considered here are now based on administrative data or a mixed mode approach, this problem is no longer as clearly observed in survey data but a portion of the sample is still respondent-based.

During processing, the taxes liable to the Quebec provincial government must be imputed. This calculation is complex and certain approximations are required as Statistics Canada does not have access in the federal file to all the inputs used by the Ministère du revenu du Québec and certain deductions are exclusively available on the provincial returns. This problem does not arise when computing only an aggregate measure such as for SNA as reports on aggregate income tax revenue are available from the provincial authority.

In addition, Census does not offer disaggregated federal and provincial taxes for 2005 and SNA requires consulting separate accounts to split the aggregated figure.

One remaining internal consistency issue common to all programs relates to the desire to compare income tax to Total income. However, the total income concept we have developed may include non-taxable elements (such as child benefits, social assistance, etc.) and not necessarily all taxable components as considered by CRA (such as capital gains and RRSP withdrawals). Therefore, the computation of taxation rates is subject to some discussion.

After-tax income

By construction, with total income and income taxes paid, SLID, T1FF and Census programs compute a measure of after-tax income. Across these three programs, the concept of after-tax is identical. However, while the SLID and T1FF agree quite closely (less than 1% difference for the aggregate), the Census is substantially higher. This follows from the higher amounts seen for total income and might be related to coverage issues in each of the statistical programs. Since total income is not equivalent in the SNA, the after-tax income that could be computed would not be conceptually equivalent either.

Table 14 Comparison of aggregate after-tax income, 2005

Harmonised name	SLID[1]	T1FF[1]	Census	SNA (IEA)[1]
	millions $			
After-tax income	699,112	695,008	711,003	.

. not available for any reference period

1. Consult Appendix E for the meaning of acronyms.

After-tax income proves useful to analyse the economic means available (usually to the family or household) after provision of the government transfers and payment of taxes. Other special-purpose measures also exist on these databases which differ from after-tax or total income. For example, disposable income is after-tax income from which spending amounts considered mandatory are removed (contributions to public and private pensions, child care in order to work, out-of-pocket medical expenses, spousal support,…). On T1FF, an alternative version of total income that corresponds to line 150 on the tax return permits analysis according to a tax-based conceptual framework.

6. Income distributions and family income

The aggregate amounts of income have been helpful to highlight some of the substantial differences across statistical programs and identify some areas requiring caution for analysis. However, the analysis is not always conducted at the aggregate level; in fact, it is often based on more disaggregated information[24]. The differences observed while comparing aggregate amounts may or may not be applicable to the disaggregated statistics. Further discrepancies may also be discovered.

Thus the comparison, to be useful for all types of analysis, may need to be reconsidered at the individual level (usually for earnings or market income but could also be for any specific component or total income) and at the family or household level (usually for total income or after-tax income).

SNA makes no attempts to consider disaggregated statistics; there is only the PUBS sector as a whole so that source must be excluded from all distributional analysis.

SLID, the Census and T1FF all offer some type of families as possible aggregation levels from the individual level building block. Where available, the preferred unit of analysis is often the economic family[25] and SLID and Census focus their analytical output on these units. Other sources may force analysis to occur with household income or, in the case of administrative data like T1FF, census families.

Therefore, enhancing the comparison to a micro-economic level will only be possible for the three sources based on a micro-economic perspective.

24. For example, income distributions of families or households may be of interest to study inequality or construct measures of low income.
25. The economic family represents all persons related by blood or marriage living in the same dwelling. Persons living alone or only with unrelated persons are considered persons not in economic families (sometimes identified as un-attached individuals in older materials).

Appendix A Comparison of population coverage

Table A Population coverage comparison, 2005

	SLID[1]	T1FF[1]	Census	SNA[1]
Population covered	Sample survey of about 30,000 (two panels of 15,000) households. Certain exclusions (see below) estimated to represent less than 3% of population.	Persons who completed T1 tax return and families eligible for the Canada Child Tax Benefit plus non-filing partners and children. Covers about 95% of population.	Canadian citizens, landed immigrants living in Canada or temporarily abroad. Non-permanent residents living in Canada. Income questions asked of 20% of dwellings	Covers the entire PUBS[2], not specific individuals. Estimates derived from surveys and administrative data.
Person count	25,583,000 aged 16+ 31,516,000 all ages	23,951,820 taxfilers 31,099,150 taxfilers and dependents	25,664,220 aged 15+ 31,240,030 all ages	Not applicable
Sample size	56,320 aged 16+ 69,600 all ages	As above	5,270,000 aged 15+ 6,470,000 all ages	Not applicable
Geography variations:				
- Persons living on Indian Reserves	Excluded	Included[3]	Included[4]	Income included
- Residents of territories	Excluded	Included	Included	Income included
- Canadians living outside Canada	Excluded	Excluded unless filed from address in Canada or spouse lives in Canada	Canadian government employees (and families) temporarily working/posted abroad.	No
Dwelling type variations:				
- Residents of institutions	Excluded	Included	Excluded[5]	Income included
- Residents of Hutterite colonies	Included	Included	Income of this group set to $0	Income included
- Military living on barracks	Excluded	Included	Included	Income included
Personal characteristics variations:				
- Age exclusions (with respect to 2005 income data)	Income of those under 16 as of Dec. 31, 2005 excluded	Taxfilers of all ages included.	Income of those under 15 as of May 16, 2006 excluded	No exclusions
- Persons who died during year 2005 (with respect to 2005 income data)	Deceased and income of deceased excluded	Deceased excluded, if surviving spouse, income of the deceased attributed to the survivor	Deceased and income of deceased excluded	All 2005 income included
- Persons who died Jan. 1 to May 16, 2006	Persons and 2005 income included.	Persons and 2005 income included.	Persons and 2005 income excluded.	All 2005 income included
- Recent immigrants	Under-covered because of the longitudinal sampling method	Included only if they filed	2005 income excluded for those landed after Dec. 31, 2005 even if they were possibly in Canada	Income included

Table A Population coverage comparison, 2005 (continued)

	SLID	T1FF	Census	SNA
Response rate	73.3%	Not measured	97.0%	Not applicable
Imputation rates for complete income non-response	2.7%	0.0%	9.3%	Not applicable
Imputation rates for partial non-response	23.5%	7.7%	29.3%	Not applicable
Calibration / slippage	Population estimates, Household and family estimates and T4 earner classes. 15.2% of person-level slippage is corrected	No calibration	Adjustment for non-response (3%) is performed and long form data are calibrated to the population counts but data are still subject to census net under-coverage of 2.8%	Targets administrative data Must balance with other elements of SNA
Geography	Canada, provinces and selected census metropolitan areas (CMA)	Canada, provinces and territories and very detailed postal geographies	Canada, provinces and territories and very detailed standard geographies	Canada and provinces and territories in Provincial economic accounts (PEA)

1. Consult Appendix E for the meaning of acronyms.
2. PUBS: Persons and Unincorporated Business Sector, includes: *Personal sector*: All persons, households *and associations of individuals serving households.* Associations of individuals are non-profit institutions serving households, such as churches, labour unions and charitable organizations, plus credit unions, trusteed pension plans, life insurance companies, fraternal societies and mutual non-life insurance companies. *Unincorporated business sector*: All business transactors whose legal form of organization is not the corporation. Includes independent business operators, self-employed farmers, fishermen and professionals and unincorporated landlords (including those renting to themselves).
3. As tax requirements are slightly different on Indian reserves, the filing behaviour and coverage could be different..
4. Census figures excludes data for incompletely enumerated Indian reserves or Indian settlements
5. Residents of institutions are all enumerated with the Census short form that contains no income questions.

Appendix B Individual reconciliations to standard component list, 2005

Table B.1 Reconciliation of Survey of Labour and Income Dynamics (SLID) to Harmonised Concepts, 2005

	Published data[1,2]		Adjustments	Comparable data		
	Provinces Only	Provinces Only	Provinces Only	Provinces Only		
Cansim Table 202-0407 Income of individuals, by sex, age group and income source, 2005 constant dollars, annual	Number of recipients (x 1,000)	Aggregate income of recipients (dollars x 1,000,000)	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Harmonised name
Total income	24,872[A]	844,406[A]	...	24,872	844,406	01. Total income
Market income	22,394[A]	747,773[A]	...	22,394	747,773	02. Market income
Earnings	18,393[A]	640,580[A]	...	18,393	640,580	03. Employment income
Wages, salaries and commissions	16,692[A]	585,081[A]	...	16,692	585,081	04. Wages and salaries
Self-employment income	2,837[A]	55,499[C]	...	2,837	55,499	05. Self-employment
Self-employment income, farm	359[C]	2,497[E]	...	359	2,497	06. Net income from farm self-employment
Self-employment income, non-farm	2,518[B]	53,002[C]	...	2,518	53,002	07. Net income from non-farm self-employment
Investment income	8,144[A]	29,012[C]	...	8,144	29,012	09. Investment income
Retirement income	3,368[A]	58,993[B]	...	3,368	58,993	08. Retirement income
Other income	4,190[A]	19,188[C]	...	4,190	19,188	10. Other income
Government transfers	16,247[A]	96,633[A]	...	16,247	96,633	11. Government transfers
Old Age Security (OAS) and Guaranteed Income Supplement (GIS), Spouse's Allowance (SPA)	3,977[A]	26,558[A]	...	3,977	26,558	15. OAS and GIS
Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) benefits	4,782[A]	28,705[A]	...	4,782	28,705	16. Canada Pension Plan and Quebec Pension Plan benefits
Child tax benefits	3,493[A]	10,153[A]	...	3,493	10,153	12. Child benefits
Federal child benefits[3]	.	.	...	3,381	7,872	13. Federal child benefits
Provincial child benefits[3]	.	.	...	1,450	2,280	14. Provincial child benefits
Employment Insurance (EI) benefits	2,400[A]	12,688[B]	...	2,400	12,688	17. Employment insurance
Other government transfers[4]	.	.	...	10,609	20,402	18. Other government transfers
Workers compensation benefits	723[B]	5,001[C]	...	723	5,001	20. Workers compensation benefits
Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits	9,346[A]	3,154[A]	...	9,346	3,154	19. Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits
Provincial and territorial tax credits	5,531[A]	1,758[A]	...	5,531	1,758	22. Provincial and territorial tax credits
Social assistance	1,292[B]	8,616[C]	...	1,292	8,616	21. Social assistance

Table B.1 Reconciliation of Survey of Labour and Income Dynamics (SLID) to Harmonised Concepts, 2005 (continued)

Cansim Table 202-0407 Income of individuals, by sex, age group and income source, 2005 constant dollars, annual	Published data[1]		Adjustments			Comparable data
	Provinces Only	Provinces Only	Provinces Only	Provinces Only		
	Number of recipients	Aggregate income of recipients	Aggregate amount	Recipients	Aggregate amount	
	(dollars					
	(x 1,000)	x 1,000,000)	millions $	thousands	millions $	Harmonised name
Other government transfers	0	0	...	.	1,873	23. Military pensions and allowances and miscellaneous transfers
Pensions, World Wars I and II[3]	...	...	+1,584	...	...	*not applicable*
War veterans' allowances[5]	...	...	+289	...	...	*not applicable*
Income tax[6]	.	.	...	16,588	145,294	24. Income tax
Federal income tax[6]	.	.	...	16,588	88,943	25. Federal income tax
Provincial income tax[6]	.	.	...	15,096	56,352	26. Provincial income tax
After-tax income[6]	.	.	...	24,877	699,112	27. After-tax income

. not available for any reference period
... not applicable

1. This table also shows average income of recipients for each component. Consulted May 3, 2007. In later editions, 2005 data were inflated to be expressed in constant dollars of the most recent year.
2. Data quality indicators are based on the coefficient of variation (CV) and number of observations. Quality indicators indicate the following:
A - Excellent (CV between 0% and 2%);
B - Very good (CV between 2% and 4%);
C - Good (CV between 4% and 8%);
D - Acceptable (CV between 8% and 16%);
E - Use with caution (CV greater than or equal to 16%).
3. Federal child benefits and Provincial child benefits are available from the database but not published separately in standard products.
4. Other government transfers is not resident on the database but is a simple aggregation of variables present.
5. Estimate from System of National Accounts, National Income and Expenditure Accounts internal data.
6. Income tax and after-tax income are not published at the individual level in number of recipients and aggregate income form. Average income tax and average after-tax income are available in other CANSIM tables.

Table B.2 Reconciliation of Annual Estimates for Census Families and Individuals (T1 Family File) to Harmonised Concepts Part 1, 2005

Cansim Table 111-0007 Neighbourhood income and demographics, taxfilers and dependents with income, by source of income	Published data		Adjustments	Comparable data				
	Canada		Canada	Canada		Provinces Only		
	Number of taxfilers and dependents	Amount of income (Dollars) (x 1,000)	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Harmonised name
Total income	23,715,660	851,595,902	+138[1]	23,721[2]	850,765	23,654	847,982	01. Total income[3]
Market income[4]	.	.	...	21,338[5]	752,542	21,277	750,013	02. Market income
Total employment income	17,553,740	637,652,144	...	17,554[5]	637,652	17,495	635,274	03. Employment income
Wages, salaries and commissions	16,098,480	592,640,842	...	16,098	594,432	16,042	592,120	04. Wages and salaries
+ exempt Aboriginal income[6,7]	.	.	+1,791	...[5]	...	...	...	*not applicable*
Self-employment	2,684,590	45,011,303	...	2,685[5]	45,011	2,679	44,935	05. Self-employment
Farm self-employment income[7]	.	.	...	390[5]	1,204	390	1,205	06. Net income from farm self-employment
Non-farm self-employment income[7]	.	.	...	2,247[5]	43,807	2,242	43,730	07. Net income from non-farm self-employment
Investment income	7,864,700	35,222,430	...	8,410	38,931	8,396	38,883	09. Investment income
+ net rental income[7]	.	.	+3,466	...	...	...	...	*not applicable*
+ limited partnership income[7]	.	.	+242	...	...	...	...	*not applicable*
Total government transfers	15,487,160	99,062,086	+131[1]	15,502[2]	98,224	15,445	97,969	11. Government transfers[3]
Employment Insurance	2,296,870	12,317,055	...	2,297	12,187	2,289	12,134	15. Employment insurance[3]
- estimate of amounts repaid with income tax filing[8]	...	...	-130	...	...	...	...	*not applicable*
Old Age Security (OAS) and net federal supplements	4,088,330	27,965,024	+ 63[1]	4,097[2]	27,188	4,092	27,152	17. OAS and GIS[3]
- estimate of amounts repaid with income tax filing[8]	...	...	-839	...	...	...	...	*not applicable*
Canada Pension Plan (CPP) and Quebec Pension Plan (QPP)	5,017,190	30,180,437	...	5,017	30,180	5,010	30,144	16. Canada Pension Plan and Quebec Pension Plan benefits
Child benefits[4]	.	.	...	3,427	11,251	3,414	11,204	12. Child benefits
Canada Child Tax Benefit	3,393,960	9,107,513	+63[1]	3,427[2]	9,171	3,414	9,129	13. Federal child benefits
+ provincial child benefits[7]	.	.	+2,080	1,148	2,080	1,141	2,075	14. Provincial child benefits
Other government transfers[4]	.	.	...	9,997	17,416	9,946	17,334	18. Other government transfers

Table B.2 Reconciliation of Annual Estimates for Census Families and Individuals (T1 Family File) to Harmonised Concepts Part 1, 2005 (continued)

Cansim Table 111-0007 Neighbourhood income and demographics, taxfilers and dependents with income, by source of income	Published data		Adjustments	Comparable data				
	Canada		Canada	Canada		Provinces Only		
	Number of taxfilers and dependents	Amount of income (Dollars) (x 1,000)	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Harmonised name
Goods and Services Tax Credit (GST) and Harmonized Sales Tax Credit (HST)	8,510,130	3,059,187	...	8,510	3,059	8,489	3,051	19. Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits
Workers' Compensation	655,850	4,570,583	...	656	4,571	654	4,559	20. Workers compensation benefits
Social Assistance	1,356,750	8,116,220	...	1,357	8,116	1,349	8,076	21. Social assistance
Provincial Refundable Tax Credits and Family Benefits	6,843,440	3,746,066	+4[1]	6,025[2]	1,670	5,984	1,647	22. Provincial and territorial tax credits
- provincial child benefits[7]	.	.	-2,080	...	...	...	...	*not applicable*
item not published in standard table	.	.	...	3,342	56,522	3,338	,465	08. Retirement income
Private pensions	3,230,740	54,526,994	...	...	...	...	...	*not applicable*
- lump-sum transfers[9]	.	.	-365	...	...	...	...	*not applicable*
Registered Retirement Savings Plan (RRSP)	415,630	2,595,343	+8[1]	...	...	...	...	*not applicable*
- lump-sum transfers[9]	.	.	-243	...	...	...	...	*not applicable*
Other income	4,983,880	22,536,905	...	4,026	17,261	4,016	16,908	10. Other income
- net rental income[7]	.	.	-3,466	...	...	...	...	*not applicable*
- limited partnership income[7]	.	.	-242	...	...	...	...	*not applicable*
- exempt Aboriginal income[6,7]	.	.	-1,791	...	...	...	...	*not applicable*
- lump-sum transfers[9]	.	.	-1,567	...	...	...	...	*not applicable*

. not available for any reference period

... not applicable

1. Adjustments carried out to minimise suppressions were reversed here. In standard tables, RRSP income may not be received by someone under 65, Canada Child Tax Benefits must be received by a parent in a family with children, OAS and net federal supplements may not be received by persons aged less than 60.
2. The reversal of suppression adjustments as described in note 1 also affects the recipient counts.
3. Amounts that were paid but clawed-back at tax time for Employment Insurance benefits and Old Age Security pension amounts based on the individual's net income for the year were subtracted from these aggregates. The number of recipients has not been adjusted.
4. Variable is not available on database but is a simple aggregation of other components.
5. For these employment income components, individuals with net income of zero are considered recipients if they had off-setting positive and negative amounts.
6. Exempt Aboriginal income, originally included in Other income, is reclassified here according to its main component: wages and salaries.
7. This variable is available directly on the database but not published in this Cansim table.
8. Old Age Security payments and certain Employment Insurance benefits must be repaid at tax time at certain income levels.
9. This transfers are really movements between savings vehicles (usually registered plans) and cannot be considered income.

Table B.3 Reconciliation of Annual Estimates for Census Families and Individuals (T1 Family File) to Harmonised Concepts Part 2, 2005

	Published data		Adjustments	Comparable data				
	Canada		Canada	Canada		Provinces only		
Cansim Table 111-0026 Neighbourhood income and demographics, taxfilers and dependents by sex, income tax, deductions and benefits	Number of taxfilers and dependents	Dollar amount claimed on income tax form	Aggregate amount	Recipients	Aggregate amount	Recipients	Aggregate amount	Harmonised name
		(x 1,000)	millions $	thousands	millions $	thousands	millions $	
Total income[1]	23,715,660	851,595,902	...	...	...	...	...	*not applicable*
Total income taxes paid	16,290,250	154,372,475	...	16,290	153,403	16,244	152,974	24. Income tax[2,3]
Federal taxes	15,983,860	97,827,644	...	15,986[4]	93,683	15,940	93,375	25. Federal income tax[3]
- estimate of amounts repaid with income tax filing[5]	...	...	- 969	...	...	...	...	*not applicable*
Provincial taxes	14,801,880	59,720,213	...	14,802	59,720	14,758	59,599	26. Provincial income tax
Quebec abatement	3,837,440	3,175,383	...	...	...	...	...	*not applicable*
After-tax income[6]	.	.	...	23,733[4,6]	697,362	23,667	695,008	27. After-tax income
Capital gains received	2,220,970	33,397,382	...	...	...	...	...	*not applicable*
Employment Insurance premiums	14,573,390	7,089,330	...	...	...	...	...	*not applicable*
Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) premiums	15,433,340	18,172,785	...	...	...	...	...	*not applicable*
Registered pension plan premiums	4,236,170	10,802,601	...	...	...	...	...	*not applicable*
Annual union, professional or like dues	5,413,350	3,008,687	...	...	...	...	...	*not applicable*
Employment Insurance benefits[1]	2,296,870	12,317,055	...	...	...	...	...	*not applicable*
Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) benefits[1]	5,017,190	30,180,437	...	...	...	...	...	*not applicable*

. not available for any reference period
... not applicable
1. These amounts were also included in Cansim table 111-0007 reconciled in Table B.2.
2. Amounts that were paid but clawed-back at tax time for Employment Insurance benefits and Old Age Security pension amounts based on the individual's net income for the year were subtracted from Income tax. The number of income taxpayers was not adjusted.
3. The Quebec abatement is deducted from Total income taxes paid and Federal taxes as it is refunded to the individual at tax time.
4. Adjustments carried out to minimise suppressions were reversed here. In standard tables, persons who are not counted in Quebec may not receive the Quebec abatement.
5. Old Age Security payments and certain Employment Insurance benefits must be repaid at tax time at certain income levels.
6. Counts of after-tax income recipients are published in Cansim Table 111-0043 but no aggregate amount information is provided in standard tables.

Table B.4 Reconciliation of Census to Harmonised Concepts, 2005

Number Reporting and Aggregate Amount Reported for Each Source of Income (32) and Selected Income, Demographic, Labour Force, Educational and Cultural Characteristics (92) for the Population 15 Years and Over of Canada, Provinces, Territories, 2005 - 20% Sample Data[1]	Published data	Adjustments	Comparable data				
	Canada	Canada	Canada		Provinces Only		
	units vary by line	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Harmonised name
Total - With income	24,423,165	...					
Aggregate income $'000	866,977,494	...	24,423	866,977	24,353	864,163	01. Total income
With market income	21,850,130	...					
Aggregate market income $'000	771,160,974	...	21,850	771,161	21,788	768,573	02. Market income
With employment income	18,201,265	...					
Aggregate employment income $'000	660,719,643	...	18,201	658,216	18,142	658,064	03. Employment income
With wages and salaries	16,758,420	...					
Aggregate wages and salaries $'000	613,393,241	...	16,758	611,059	16,702	611,059	04. Wages and salaries
With self-employment income	2,658,860	...					
Aggregate self-employment income $'000	47,326,336	...	2,659	47,157	2,653	47,005	05. Self-employment
Farm self-employment income[2]	.	...	409	2,133	409	2,120	06. Net income from farm self-employment
Non-farm self-employment income[2]	.	...	2,308	45,023	2,303	44,885	07. Net income from non-farm self-employment
- limited partnership income[3]	...	-170	...	...	...	...	*not applicable*
With investment income	8,162,010	...					
Aggregate investment income $'000	37,629,112	...	8,162	37,799	8,151	37,755	09. Investment income
+ limited partnership income[3]	...	+170	...	...	...	...	*not applicable*
With retirement pensions, superannuation and annuities	3,293,360	...					
Aggregate retirement pensions, superannuation and annuities $'000	56,958,309	...	3,293	56,958	3,290	56,906	08. Retirement income
With other money income	3,767,415	...					
Aggregate other money income $'000	15,853,894	...	3,767	15,854	3,758	15,817	10. Other income
With government transfer payments	15,460,115	...					
Aggregate government transfer payments $'000	95,816,588	...	15,460	95,817	15,414	95,591	11. Government transfers
With Old Age Security pensions and Guaranteed Income Supplement	3,817,600	...					
Aggregate Old Age Security pensions and Guaranteed Income Supplement $'000	25,963,528	...	3,818	25,964	3,813	25,927	15. OAS and GIS
With Canada/Quebec Pension Plan benefits	4,869,205	...	4,869	29,051	4,863	29,018	16. Canada Pension Plan and Quebec Pension Plan benefits

Table B.4 Reconciliation of Census to Harmonised Concepts, 2005 (continued)

Number Reporting and Aggregate Amount Reported for Each Source of Income (32) and Selected Income, Demographic, Labour Force, Educational and Cultural Characteristics (92) for the Population 15 Years and Over of Canada, Provinces, Territories, 2005 - 20% Sample Data[1]	Published data	Adjustments	Comparable data				
	Canada	Canada	Canada		Provinces Only		
	units vary by line	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Recipients thousands	Aggregate amount millions $	Harmonised name
Aggregate Canada/Quebec Pension Plan benefits $'000	29,051,021	...					
With child benefits	3,569,395	...					
Aggregate child benefits $'000	11,323,628	...	3,569	11,324	3,556	11,278	12. Child benefits
With Employment Insurance benefits	2,255,210	...					
Aggregate Employment Insurance benefits $'000	12,018,421	...	2,255	12,018	2,249	11,978	17. Employment insurance
With other income from government sources	9,497,900	...					
Aggregate other income from government sources $'000	17,459,993	...	9,498	17,460	9,462	17,390	18. Other government transfers
With taxes paid	16,526,435	...					
Aggregate taxes paid $'000	153,622,108	...	16,526	153,622	16,478	153,160	24. Income tax
With after-tax income	24,418,610	...					
Aggregate after-tax income $'000	713,355,409	...	24,419	713,355	24,348	711,003	27. After-tax income

. not available for any reference period
... not applicable
1. Catalogue No. 97-563-X2006009
2. Net income from farm and non-farm self-employment is not published separately in standard products but is available from the database.
3. Limited partnership income reported on the tax form was classified for the census as non-farm self-employment. It may be better harmonised as a component of investment income.

Table B.5 Reconciliation of System of National Accounts and Provincial Economic Accounts to Harmonised Concepts Part 1, 2005

Cansim Table 384-0012 - Sources and disposition of personal income, provincial economic accounts, annual	Published data[1]	Adjustments	Comparable data		
	Canada	Canada	Canada	Provinces Only	
	(dollars x 1,000,000)	Aggregate amount millions $	Aggregate amount millions $	Aggregate amount millions $	Harmonised name
Personal savings	16,878	...	...	...	*not applicable*
Personal disposable income	794,269	...	...	...	*not applicable*
Personal income	1,035,586	...	...	...	*not applicable*
item not published in standard table	.	...	658,898	656,025	03. Employment income
Wages, salaries and supplementary labour income (national basis)	695,093	...	608,190	605,467	04. Wages and salaries
- Supplementary labour income[2]	...	-89,374	...	...	*not applicable*
+ royalties[3]	...	+2,406	...	...	*not applicable*
+ research grants[4]	...	+65	...	...	*not applicable*
item not published in standard table	.	...	50,708	50,558	05. Self-employment
Accrued net income of farm operators from farm production	1,210	...	1,210	1,210	06. Net income from farm self-employment
Net income of non-farm unincorporated business, including rent	84,024	...	49,498	49,348	07. Net income from non-farm self-employment
- imputed rent for owner-occupied dwellings[3]	...	-30,795	...	...	*not applicable*
- net rent income[3]	...	-3,731	...	...	*not applicable*
Interest, dividends and miscellaneous investment income	114,383	...	39,920	39,812	09. Investment income
+ net rent income[3]	...	+3,731	...	...	*not applicable*
- sheltered income[3,5]	...	-75,788	...	...	*not applicable*
- royalties[3]	...	-2,406	...	...	*not applicable*
Current transfers from government	136,247	...	110,748	110,394	11. Government transfers
Current transfers from corporations	2,072	...	...	...	*not applicable*
Current transfers from non-residents	2,557	...	...	...	*not applicable*
Deduct: Direct taxes, persons	165,051	...	64,501	163,936	26. Income tax
- estimate of amounts repaid with income tax filing[6]	...	-550	...	...	*not applicable*
Deduct: Contributions to social insurance plans	65,374	...	...	...	*not applicable*
Deduct: Other current transfers to government	10,892	...	...	...	*not applicable*
Deduct: Personal expenditure on consumer goods and services	758,966	...	...	...	*not applicable*
Deduct: Current transfers to corporations	14,029	...	...	...	*not applicable*
Deduct: Current transfers to non-residents	4,396	...	...	...	*not applicable*

. not available for any reference period

... not applicable

1. Cansim Table 384-0012 (consulted November 30, 2009). This is the final data after all revisions, earlier editions contained preliminary data.
2. From Cansim Table 382-0006 - Wages, salaries and supplementary labour income, monthly (dollars x 1,000) aggregated to annual measure.
3. Estimate based on System of National Accounts, Income and Expenditure Accounts internal data.
4. Estimate based on amounts identified on T4A slips filed with the Canada Revenue Agency.
5. Aggregation by authors; sheltered income is the sum of Investment Income of Life Insurance, Investment Income of Fraternals, Investment Income of Pension Plans, Total Implicit Income, Implicit Income, Insurance, Government Annuities, Mutual Non-Life Income and RRSP income (from the Pension Satellite Account).
6. Old Age Security payments and certain Employment Insurance benefits must be repaid at tax time at certain income levels.

Table B.6 Reconciliation of System of National Accounts and Provincial Economic Accounts to Harmonised Concepts Part 2, 2005

Cansim Table 384-0009 - Government transfer payments to persons, provincial economic accounts, annual	Published data[1] Canada (dollars x 1,000,000)	Adjustments Canada Aggregate amount millions $	Comparable data Canada Aggregate amount millions $	Provinces Only Aggregate amount millions $	Harmonised name
Total government transfer payments to persons	136,247	...	110,748	110,394	11. Government transfers
Total federal	67,903	...	...	...	*not applicable*
item not published in standard table	.	...	11,715	11,664	12. Child benefits
item not published in standard table	.	...	9,339	9,293	13. Federal child benefits
Family and youth allowances	165	...	...	...	*not applicable*
Child tax benefit or credit	9,174	...	...	...	*not applicable*
Universal child care benefit	..	...	...	...	*not applicable*
+ estimate of provincial and territorial child benefit programs[2]	...	+2,376	+2,376	+2,371	14. Provincial child benefits
Pensions, World Wars I and II	1,584	...	...	...	*not applicable*
War veterans' allowances	289	...	...	...	*not applicable*
Grants to aboriginal persons and organizations[3]	5,752	-5,177	...	...	*not applicable*
Goods and Services Tax credit	3,472	...	3,472	3,462	19. Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits
Employment insurance benefits	12,937	...	12,678	12,616	17. Employment insurance
- estimate of amounts repaid with income tax filing[4]	...	-259	...	...	*not applicable*
Old age security payments	29,085	...	26,031	25,996	15. OAS and GIS
- estimate of amounts repaid with income tax filing[4]	...	-291	...	...	*not applicable*
- adjustment for institutional residents[5]	...	-2,240	...	...	*not applicable*
- adjustment for deaths during year[6]	...	-524	...	...	*not applicable*
Scholarships and research grants[7]	789	-521	...	...	*not applicable*
- research grants[8]	...	- 65	...	...	*not applicable*
Miscellaneous and other transfers[9]	4,656	-3,818	...	...	*not applicable*
Total provincial	33,297	...	...	...	*not applicable*

Table B.6 Reconciliation of System of National Accounts and Provincial Economic Accounts to Harmonised Concepts Part 2, 2005 (continued)

Cansim Table 384-0009 - Government transfer payments to persons, provincial economic accounts, annual	Published data[1] Canada (dollars x 1,000,000)	Adjustments Canada Aggregate amount millions $	Comparable data Canada Aggregate amount millions $	Provinces Only Aggregate amount millions $	Harmonised name
Social insurance benefits, workers' compensation	5,229	...	5,229	5,201	20. Workers compensation benefits
Social insurance benefits, other	..	...	...	...	*not applicable*
Grants to benevolent associations[10]	9,581	-9,581	...	...	*not applicable*
Social assistance, income maintenance	6,918	...	13,389	13,313	21. Social assistance
Social assistance, other	3,445	...	...	...	*not applicable*
Miscellaneous transfers	8,124	...	...	...	*not applicable*
- estimate of provincial and territorial child benefit programs[2]	...	-2,376	...	...	*not applicable*
Total local[11]	3,026	-303	...	...	*not applicable*
item not published in standard table	.	...	31,025	30,858	18. Other government transfers[12]
item not published in standard table	.	...	29,299	29,261	16. Canada Pension Plan and Quebec Pension Plan benefits
Canada Pension Plan (CPP)	24,225	...	.	.	*not applicable*
Quebec Pension Plan (QPP)	7,796	...	.	.	*not applicable*
- adjustment for institutional residents[5]	...	-1,665	...	...	*not applicable*
- adjustment for deaths during year[6]	...	-1,057	...	...	*not applicable*

. not available for any reference period
.. not available for a specific reference period
... not applicable
1. Cansim Table 384-0009 consulted 2009-11-30. This is the final data after all revisions, earlier editions contained preliminary data.
2. Provincial and territorial child benefits were estimated from adminstrative data and program reports.
3. Adjusted for the estimated 90% proportion of grants paid to Aboriginal organisations.
4. Old Age Security payments and certain Employment Insurance benefits must be repaid at tax time at certain income levels.
5. For this paper, amounts are harmonised towards the household concept, excluding institutional residents (estimates based on Census counts).
6. Excludes amounts paid to persons deceased by year-end (estimate based on T1 filings).
7. Adjusted for the estimated 66% proportion of amounts paid to institutions.
8. Estimate based on amounts identified on T4A slips filed with the Canada Revenue Agency.
9. Adjusted for the estimated 82% proportion paid to charitable organisations.
10. These amounts were not paid to households but to the non-profit institutions serving households.
11. Adjusted for the estimated 10% proportion paid in-kind (excluded from the money income concept).
12. This component is the sum of adjusted values for all provincial and local transfers (except estimated provincial child benefit programs) and the following federal items: Goods and Services Tax credit, Pensions, World Wars I and II, War veterans' allowances, Grants to aboriginal persons and organizations; Scholarships and research grants, Miscellaneous and other transfers.

Appendix C Summary comparison of adjusted income sources, 2005

Table C Comparison of Aggregate Components by Source, 2005

Harmonised Name	SLID[1]	T1FF[1]	Census[1]	SNA (IEA)[1]	Administrative Data[2]
	millions $				
01. Total income	844,406	847,982	864,163	.	.
02. Market income	747,773	750,013	768,573	.	.
03. Employment income	640,580	635,274	658,064	656,025	.
04. Wages and salaries	585,081	592,120	611,059	605,467	602,573
05. Net income from self-employment	55,499	44,935	47,005	50,558	.
06. Net income from farm self-employment	2,497	1,205	2,120	1,210	.
07. Net income from non-farm self-employment	53,002	3,730	44,885	49,348	.
08. Retirement income	58,993	56,465	56,906	.	.
09. Investment income	29,012	38,883	37,755	39,812	.
10. Other income	19,188	16,908	15,817	.	.
11. Government transfers	96,633	97,969	95,591	110,394	.
12. Child benefits	10,153	11,204	11,278	11,664	.
13. Federal child benefits	7,872	9,129	.	9,129	9,129
14. Provincial child benefits	2,280	2,075	.	2,371	2,371
15. OAS and GIS	26,558	27,152	25,927	25,996	29,052
16. Canada Pension Plan and Quebec Pension Plan benefits	28,705	30,144	29,018	29,261	31,614
17. Employment Insurance benefits	12,688	12,134	11,978	12,616	13,398
18. Other government transfers	20,402	17,334	17,390	30,858	.
19. Goods and Services Tax (GST) and Harmonized Sales Tax (HST) credits	3,154	3,051	.	3,462	.
20. Workers compensation benefits	5,001	4,559	.	5,201	4,970
21. Social assistance	8,616	8,076	.	13,313	9,163
22. Provincial and territorial tax credits	1,758	1,647	.	.	.
23. Military pensions and allowances and miscellaneous transfers	1,873	.	.	.	.
24. Income tax	145,294	152,974	153,160	163,936	.
25. Federal income tax	88,943	93,375	.	.	.
26. Provincial income tax	56,352	59,599	.	.	.
27. fter-tax income	699,112	695,008	711,003	.	.

. not available for any reference period

1. These data have been adjusted to account for measurable conceptual differences as per reconciliation tables in Appendix B.
2. The administrative data have not been adjusted conceptually to mimic the coverage expected of the other data programs. Refer to table 10 for sources.

Appendix D References

Income concepts

Final Report and Recommendations of the Canberra Group, Expert Group on Household Statistics, Ottawa, 2001

United Nations' *Principles and Recommendations for Population and Housing Censuses*, Revision 2, 2007

Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing, 2006

Statistics Canada Population and demography classification standards: Other standard classifications by subject

Program materials

3889	Survey of Labour and Income Dynamics (SLID)
75F0002M2007003	Data Quality in the 2005 Survey of Labour and Income Dynamics (SLID)
75F0002M2007001	Survey of Labour and Income Dynamics (SLID): Preliminary, Labour and Income Interview Questionnaire for Reference Year 2005
4105	Annual Estimates for Census Families and Individuals (T1 Family File)
17-507-XIE	Neighbourhood Insights - Your Guide to the Statistical Information Packages Available From Small Area and Administrative Data Division, Statistics Canada
4107	Longitudinal Administrative Data (LAD)
12-585-XIE	Longitudinal Administrative Data Dictionary
3901	Census of Population
92-566-XWE	2006 Census Dictionary
97-563-GWE2006003	Income and Earnings Reference Guide, 2006 Census
92-393-XIE	2001 Census Income Data, 2001 Census Technical Report (Reference Products: 2001 Census)
1901	National Income and Expenditure Accounts
1902	Provincial Economic Accounts
13-605-X200800210641	Preliminary results of the Pension Satellite Account, 1990 to 2007
11-010-X	"What does the Pension Satellite Account tell about Canada's pension system?" in *Canadian Economic Observer*, Vol. 22, no. 11

Prior comparisons or reconciliations

75F0002M2004012	Comparison of Income Estimates Across Household Survey Programs
75F0002MIE1997002	Differences in Income Estimates for Persons
75F0002MIE1997003	Differences in Income Estimates for Families
11F0019MIE2004219	Rising Income Inequality in the 1990s: An Exploration of Three Data Sources

Techniques

75F0002MIE2004010	Describing the Distribution of Income: Guidelines for Effective Analysis
75F0002MIE2001002	Results of the Tax Permission Questionnaire in the Survey of Labour and Income Dynamics
75F0002MIE1996012	Some Data Quality Impacts When Merging Survey Data on Income with Tax Data

Appendix E Acronyms

ALL	Allowance program (usually with OAS and GIS)
CPP	Canada Pension Plan
CRA	Canada Revenue Agency
CCTB	Canada Child Tax Benefit
EI	Employment Insurance
GIS	Guaranteed Income Supplement
GST	Goods and Services Tax
GSTC	Goods and Services Tax Credit
HST	Harmonized Sales Tax
IEA	Income and Expenditure Accounts
LAD	Longitudinal Administrative Data
NPISH	Non-profit institutions serving households
OAS	Old Age Security
PEA	Provincial economic accounts
PUBS	Persons and Unincorporated Business Sector
QPP	Quebec Pension Plan
RPP	Registered pension plan
RRIF	Registered Retirement Income Fund
RRSP	Registered Retirement Savings Plan
SA	Social Assistance
SE	Self-employment
SLI	Supplementary Labour Income
SLID	Survey of Labour and Income Dynamics
SNA	System of National Accounts
T1	Income tax and benefits return (T1 personal tax return)
T4	Statement of Remuneration Paid
T1FF	Annual Estimates for Census Families and Individuals (T1 Family File)